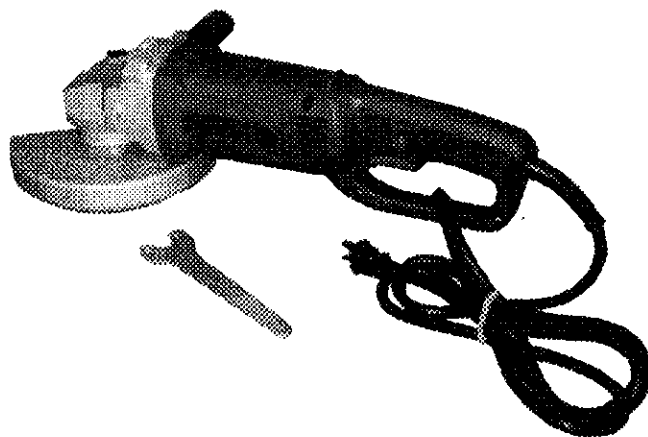


CHICAGO Electric Power Tools

7" ANGLE GRINDER

Model 46237

ASSEMBLY AND OPERATING INSTRUCTIONS




3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

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For technical questions and replacement parts, please call 1-800-444-3353

Specifications

ITEM	DESCRIPTION
Motor Specs	120V/60HZ Single Phase, 1300 Watts Input, 780 Watts Output,
 Double Insulated	1-2/3 HP Peak Power Motor, 11 Peak Amps, 8500 RPM,
Spindle Thread	5/8" x 11
Wheel Dia. (not included)	7"
Arbor Adaptor	7/8"
Net Weight	8.45 Lbs.



⚠ DANGER
Grinding Wheel used
must be rated at 8500
RPM or higher

Save This Manual



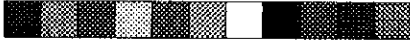
You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

- Keep work area clean.** Cluttered areas invite injuries.
- Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
- Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
- Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
- Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

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8. **Use eye, face and ear protection.** Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings. Wear an ANSI approved dust mask or respirator when working around metal, and chemical dusts and mists. Always wear ear plugs to protect your hearing.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
10. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician.
11. **Disconnect power.** Unplug tool when not in use.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
16. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
17. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
18. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
19. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or

cause electrical damage to the tool. This tool requires use of an extension cord of 0 to **10 amps** capability (up to 50 feet), with wire size rated at **18 AWG**. Longer extension cords require larger size wire. If you are using the tool outdoors, use an extension cord rated for outdoor use. (signified by "WA" on the jacket).

20. **Do not abuse Line Cord.** Never carry the tool by the Line Cord or disconnect the plug from the electrical outlet by pulling on the Line Cord. Do not cut the Line Cord or place it near heat that could cause the Line Cord to melt.
21. **Secure the material being cut.** Never use your hands to hold the material while grinding or cutting. Keep one hand on the Handle and the other on the Body of the Angle Grinder at all times.
22. **Never use the tool without the Safety Guard in place.** If the Wheel breaks apart, flying pieces could cause personal injury.
23. **Use the proper grinding or cutting wheels.** Use Wheels rated for the speed of this tool. Otherwise, the Wheels could fly apart and cause injury.
25. **Do not grind or sand lead-based paints.** Lead-based paints are hazardous to your health and should only be removed by a professional.
26. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.

Note: Performance of this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Warning: Operation of equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: A) Lead from lead-based paints; B) Crystalline silica from bricks and cement or other masonry products; C) Arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code 25249.5, et seq.)

Unpacking

When unpacking, check to make all parts listed on Page 7 are included.

If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

Assembly

Warning: Always use an approved and proper guard when using the recommended accessories. Each accessory must have the correct Arbor size and must fit properly on the Shoulder Bushing. Make sure accessories are tightened down securely. Never install a carbide tipped or steel circular blade for use on this Angle Grinder. Never install a wood carving blade, carving disc with saw chain cutters, or a cutting-carving disc.

Warning: Disconnect the tool from electrical power source before following this procedure.

Mounting the Wheel Accessory and Handle

See the Assembly Diagram on Page 8 to reference part numbers.

1. Push the Brake Pin [22] button while slowly turning the Outer Flange [1] with the Spranner [50] provided until the Brake Pin depresses fully. This will prevent the Spindle [7] from spinning and allow you to unscrew the Outer Flange.
2. Remove the Outer Flange and place the Accessory Wheel (not included) over the Spindle.
3. Replace the Outer Flange and tighten using the Spranner.
4. Attach the Side Handle [24] by screwing it into the hole on the right, left or top of the Reducer [19], depending on your preference.

Operation

Warning: There are certain applications for which this tool was designed. Harbor Freight Tools strongly recommends that this tool not be modified and/or used for any application other than that for which it was designed. All accessories must be rated for at least the RPM speed recommended on the tool's warning label. Wheels and other accessories running over their rated speed can fly apart and cause injury.

1. Attach the Wheel Accessory and Handle as described in the previous section.
2. Adjust the Wheel Guard so that it provides a shield between you (the user) and the material you are working on. You may need to loosen the Nut [4] that holds the Guard in place, reposition the Guard, and tighten the Nut again, in order to safely protect yourself while using this tool.

3. Plug the Cord [41] into the electrical outlet, or into an approved extension cord.
4. Secure the material being cut. Hold the Handle with one hand, and the Back Handle [44] with the other, and press down on the Switch [38] (See Fig. 1 on Page 8). This will start the motor. Allow the motor to reach its full speed before grinding. Make sure the Wheel is rotating evenly and all parts appear to be working properly.
5. To begin cutting or grinding, approach the material at an angle between 15 and 30 degrees to the Wheel. Maintain that angle until you are finished cutting/grinding. Do not force the Wheel or apply too much pressure. If the Wheel slows down as you work with your material, you are applying too much pressure.
6. To lock the tool in the "On" position, activate the Switch and push the Switch Lock [51] button located on the left side of the Back Handle. Now you can continue grinding without having to hold onto the Switch. Keep your hand in same position in case you need to shut off the unit in a hurry. To turn the tool off, press down on the Switch again.
7. Once you have turned the Grinder off, hold onto both Handles until the motor stops completely before you set it down.

Maintenance

1. Before performing any maintenance, must be sure cord is removed from electrical outlet or extension cord. Periodically blow compressed air through the motor vents to clean.
2. All plastic parts should be cleaned with a damp cloth. Never use solvents.
3. If the tool's performance seems to be weakening, you may need to clean or replace the Carbon Brushes [46]. To do so, unscrew the Brush Cap [45] using a flat head screwdriver and pull Brush from the Plastic Housing [35]. Clean the Brush with an eraser if it appears dirty but still functional. If it looks damaged or excessively dirty, have the Brushes replaced by a qualified technician.
4. Store the Angle Grinder in a clean and dry location when not in use. Keep away from children at all times.
5. Under normal operating conditions, lubrication is not required.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Item No.	Part Name	Q'ty	Item No.	Part Name	Q'ty
1	Outside flange	1	25	Spring washer 8	1
2	Inner flange	1	26	Small gear	1
3	Wheel guard	1	27	Bearing 80201	1
4	Nut M8	2	28	Armature	1
5	Screw M8 × 25	1	29	Bearing 80018	1
6	Key 4 × 5 × 13	1	30	Rubber bush	1
7	Spindle	1	31	Guide wind circle	1
8	Screw M5 × 16	1	32	Screw ST4.2 × 75	1
9	Spring washer 5	4	33	Stator	1
10	Bearing housing	1	34	Terminal	2
11	Bearing 80102	1	35	Plastic housing	1
12	Bearing cover	2	36	Name plate	1
13	Screw M4 × 10	6	37	Back handle(A)	1
14	Spring washer 4	6	38	Switch	1
15	Big gear	1	39	Screw ST4.2 × 14	2
16	Circclip for shaft	1	40	Cord clip	1
17	Bronze bush	1	41	Cord	1
18	Screw ST5 × 35	4	42	Rubber sleeve	1
19	Reducer	1	43	Screw ST4.2 × 22	5
20	"E" ring 6	1	44	Back handle(B)	1
21	Spring	1	45	Brush cap	2
22	Brake pin	1	46	Carbon brush	2
23	Rubber plunge	3	47	Brush holder	2
24	Side handle	1	50	Spranner	1
			51	Switch Lock	1

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

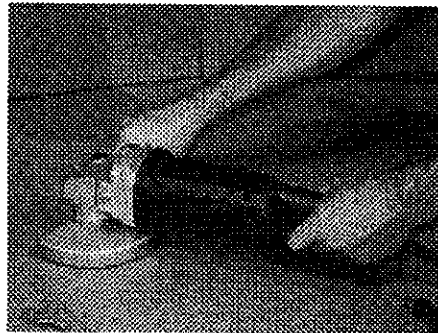


Fig. 1: Using both Handles

Assembly Drawing

